

Solutions

Each answer shows the steps, then the **result**.

2.1

- $\Phi_B = BA = 0.30 \times 0.10 = 0.030 \text{ Wb}$

2.2

- change the field strength B , the area A , or the angle θ

2.3

- an induced emf

3.1 A

3.2 B

- the plane perpendicular to the field means the loop faces it

3.3

(a)

- $\Phi_B = BA = 0.40 \times 0.050 = 0.020 \text{ Wb}$

(b)

- zero ($\theta = 90^\circ$)